A DISCOVERIE

For Diviſion or Setting out of Land, as to the beſt Form.

Publiſhed by *Samuel Hartlib* Eſquire, for Direction and more Advantage and Profit of the Adventurers and Planters in the *FENS* and other Waſte and undiſpoſed Places in *England* and *IRELAND*.

Whereunto are added ſome other Choice Secrets or Experiments of Husbandry.

With a Philoſophical Quere concerning *the Cauſe of Fruitfulneſs.*

AND

An Eſſay to ſhew How all Lands may be improved in a New Way to become the ground of the increaſe of Trading and Revenue to this Common-wealth.

LONDON,
Printed for *Richard Wodenothe* in *Leaden*-hall-ſtreet, 1653.

TO THE READER.

Christian Reader,

THE hopes which we have of a more speedie Reformation in time to come, and of a readier dispatch of Publique Designes then formerly, doth encourage me to offer to the view of the Publique these Motions, which haply may finde acceptance, if not so farre as to be set up by Authority; yet to be understood by private Persons, that they may finde their Conveniencie therein.

They concerne, as thou maiest see, chiefly the Advantages of Husbandry, to remedie some Defects and Disorders, which are found therein; and to lay the foundations of Trade and Commerce to increase the same; and all this by some Orderly Contrivances, which may produce incredible Effects, if rightly undertaken and attended. If I should intend to lay open the Mischievousnesse of Disorderlinesse and Confusion, I might fill a Volume; it is either the root or the effect of all the evils of this

World; whether they afflict our Soul or our Body, and concern our private or our publick Relations; and to bring our ſelves and our affairs into a righteous Order, is the great Work which every one ſhould attend within himſelf; and the greateſt good which can be procured at any time unto others; and at this time unto the Publique: it is therefore incumbent to all, equally to ſerve one another herein, according to their utmoſt ability; and except all concur to order themſelves aright both within themſelves, and towards each other, we cannot be throughly happy nor ſetled in any courſe ſucceſsfully, becauſe it is in Humane Societies almoſt as in a Watch, except all the Wheels be not only ſound and well ſetled upon their own axle-trees; but fitly ordered to correſpond with each other, there can be no Univerſall Motion, becauſe the diſorderlineſs of one will diſturbe many from acting in their Spheres; ſo it fals out in moſt matters of Humane Society chiefly in Trade, and in ſome points alſo of Husbandry, as by this following Diſcourſe will appear. Therefore, that which one ſays is to be heeded; Quod omnes tangit ab omnibus curari debet. That which is the concernment of all, ought to be the care of all; *but no man can make this to be ſo; except the ſpirits of men be raiſed to a pitch anſwerable to the worth of things offered unto them. For as* Seneca *ſaith,* Magno animo de rebus magnis judicandum eſt; alias illarum vitium eſſe videbitur quod noſtrum eſt. Great Matters are to be weighed with a raiſed minde, otherwiſe the fault will ſeem to be in them, which is in our ſelves. *And although theſe things may perhaps ſeem to ſome, of no great moment, yet if they be lookt into duly, they will be found ſuch, as have an influence, upon the Fundamentalls of the Settlement of Common-wealths. For if Husbandry, and Trade at home and abroad be well regulated; all hands may be Employed, and where all hands are at work, there the whole ſtrength of a Nation, doth put forth its endevours, for its own advantage, which if it can be directed to do in an*

Or-

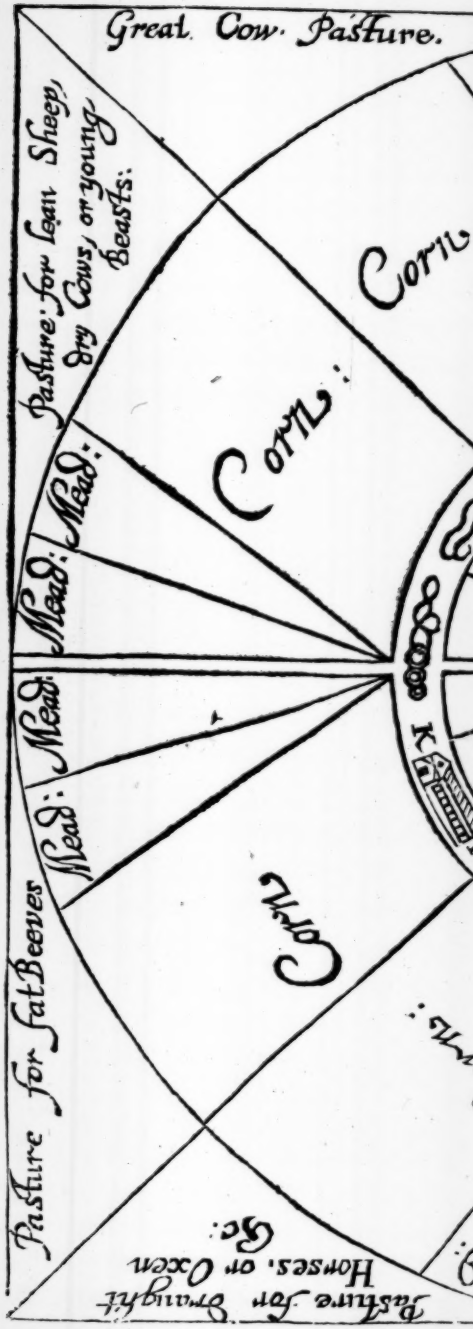
Orderly Way; and with a joynt Concurrence of all parts to one and the same effect; it is not to be imagined how ſucceſſful ſuch an Undertaking may be; As for myſelf, I have in my ſtation bin faithful to offer Objects of this and ſome other kinde unto the Publike, to provoke every one to minde the beſt things for their own and the Publike Good; and although in this endevour, wherein for many years I have continued in the midſt of ſome difficulties, and all our Changes, and have ſpent my ſelf thereupon as upon a neceſſary duty; yet I have found no great Encouragement thereunto from abroad, more then what mine own reſolution (to perſevere faithful unto the end in well doing) did ſuggeſt unto me; nevertheleſs I hope I ſhall not faint. For I hope the Lord will continue me in the Apoſtles minde, that I may ſay from my heart, 2 Cor. 12. 15, 16. That I will very gladly ſpend and be ſpent for the good of others, *although for the moſt part it proves a thankleſs office, and the more abundantly one is found to love the Publike; the leſs he is loved: Yet let it be ſo with me; I ſhall not at any time ſeek to burden any man, but rather ſet my ſelf in doing things freely by this kinde of Craft to catch men by their own advantages, to minde the Publike, and do good one to another as ſervants of each other through love; for herein is the Law of Jeſus Chriſt fulfilled, and his Kingdom advanced amongſt us, when upon ſuch a ground truſting unto him, we do all our Affairs heartily for his ſake, and not as ſerving Men only or Our ſelves. And that thou mayeſt Chriſtian Reader be inabled to walk in all thy Ways by this Rule, is the Upright deſire of him, who ſhall always profeſs himſelf,*

Thy faithful Servant in Chriſt,

Samuel Hartlib.

This Chart is the Plot or description of one entire Lordship, or Mannor-house, with its proper Demains: or it may serve for a considerable Farm of 100, 200, *or* 300 *Acres.*

A the Mannor house, or dwelling house.
B the Kitchin Garden.
C the Orchyard.
D the Garden for choyce fruits or flowers.
E the Garden for Physicall plants, or what you will.
F F the Dary and Landry.
G G the Sheep coats.
H H the two greatest of the home Closes to milk the Cows in, or to put a saddle Nag in.
I I the Bake house and Brew house.
K the standing racks for Oxen, &c. and the great Corn Barn.
L L Other Barns, Stables, Cow or Oxhouses, Swines styes.
M M the little houses for all sorts of Poultry.
N N More standing Racks.
O O Coney-berries.
P P little Closes for a stoned Horse, a Mare, or Fole, &c.
R R Little Closes for like purposes.
S two little Pastures for fat Sheep.
T two Closes for Pasture for Ewes, Lambs, or weaker Sheep.
V two little Pastures for a fat Beef or two.
W two little Pastures for infected Cattle.
X two little Pastures for your own, or your friends Saddle-horse, that is for present service.
Y two little Pastures for weaning Calves.



NORTH.

Great Cow Pasture.

Mead: Mead: Mead: Mead:

Corn:

Corn:

Sheep Pasture.

Mead: Mead:

Mead: Mead:

Corn.

Corn.

Sheep Pasture

Pasture for Draught &c
Cattell Horse or &c
&c.

Mead: Mead: Mead: Mead:

Corn.

EAST.

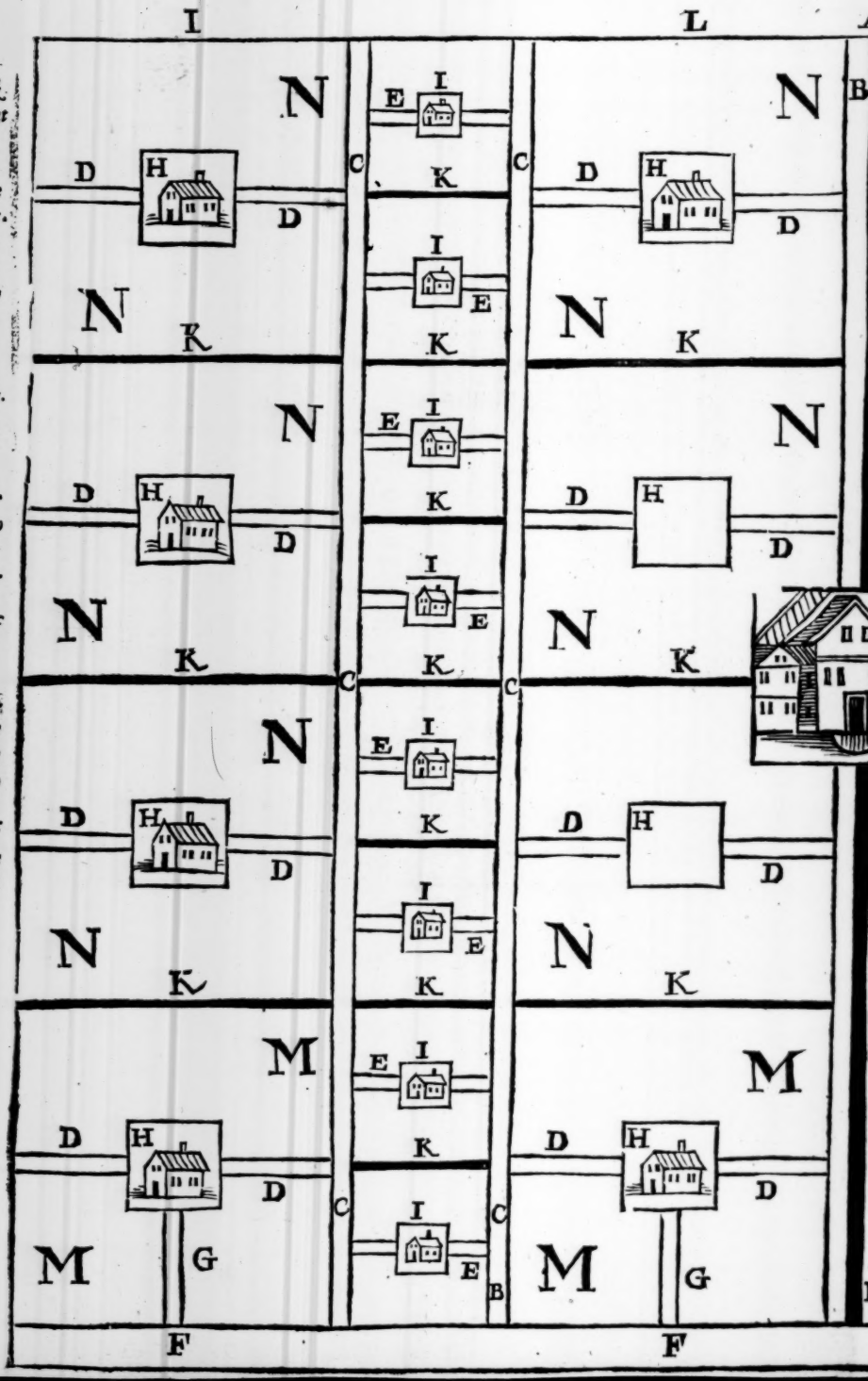
SOUTH.

A B C D E F F G G H H K K L L M M N N Q Q R R S S T T V V W X Y Y X W

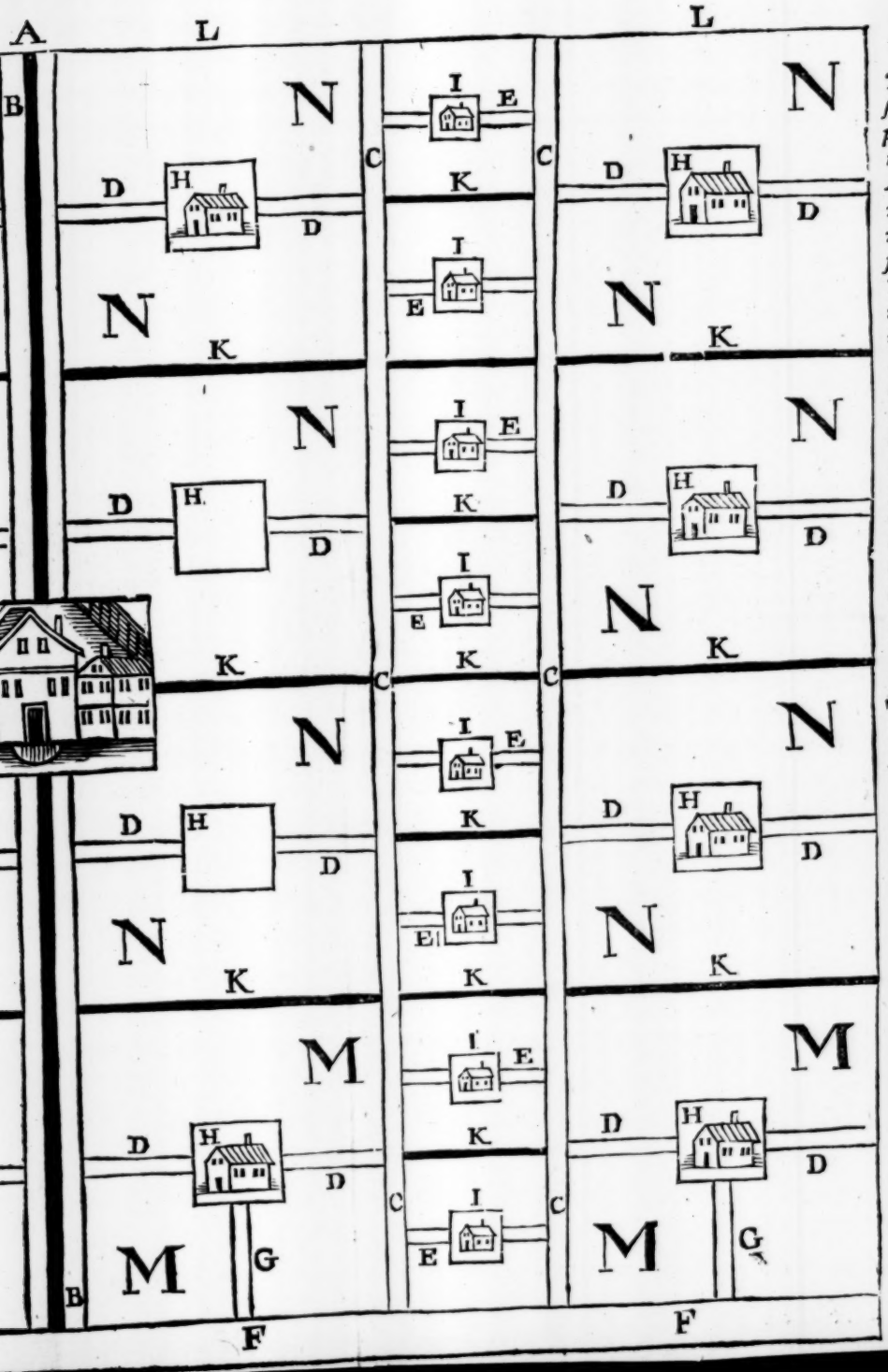
XUM

This Chart conteins 2000 *Acres, consisting of or divid*
16 *lesser Farms, consisting of* 25 *Acres apiece: And that*
divided in the middle by the great Bank or high way, with

A *the Bank.*
B *the* 2 *great Drains on each side.*
C *the foure lesser Drains.*
D *the great Ditches or Cuts to each Farm.*
E *the like Cuts to the little Farms.*
F *the main River.*
G *the Cut from the four best Farms to that River.*
H *the Farm-houses and home-stalls of the great Farms.*
I *the lesser Farm Houses*
K *the marks of division to the Farms.*
L *the mark of the ring hedge Ditch or wall*
M *the four first great Farms.*
N *the* 12 *other great Farms.*



ided into 16 great Farms, conteining 100 Acres apiece, and
so as each thousand Acres may be considered apart, as being
h the two great Drains on each side of the same.



This may serve as the plot of another greater Mannor of 2000 Acres, wherein the four middle Tenements may be made into a grand Farm, or the Lords Demains. And then there remains twelve great Farms of 100 Acres apiece, and 16 lesser Farms of 25 Acres apiece, whose inhabitants (being supposed labourers) lie cõveniently to serve either the Lord or the greater Farms. All which may be cast into either form, Round or Square, though for my part I judge the round in the square the best and most convenient.

XUM

A DISCOVERY For New DIVISIONS,

OR,

Setting out of *LANDS*, as to the beſt Forme: Imparted in a Letter to *Samuel Hartlib*, Eſquire.

HONOURED SIR,

Here preſent you with a plain Diſcovery of that prudentiall Contrivance for the more advantageous ſetting out of Lands, which I have formerly acquainted you with, and as you know offered in vain to ſome of the Company of Drayners of the great Fen, as I had

opportunity; That ſo I may not onely gratifie your Publique-heartednesse and great Zeal for the Common good, and testifie my willingnesse to be doing some good in my generation, as God shall enable me, but that I may in some sort be blameleſſe to all Posterity, though those Lands be not well divided or sub-divided, since I have not onely offered my assistance, such as it is in private, but do here (and suppose not altogether too late) freely offer it to the consideration of all men that are, or may be concerned in the same, or the like nature, of what better use Lands divided, or sub-divided, according to the Plats here intended to every mans view may be found or esteemed. And lest any mistake should be in the not rightly understanding my meaning, or the nature of the thing, give me leave to trouble the World with a few of my Reasons for, or apprehensions of that Advantage or Conveniency, which may be more had and obtained by following this Example.

I have been even called to a more then ordinary use of, and love to all sorts of Husbandry, and particularly to Agriculture, wherein God hath been graciously pleased to recompence my *Zeal*, and indeavour with an increase of knowledge and experience in the wayes of managing Agriculture and Husbandry; in all its parts; and that not onely according to what is commonly known and practised, but by some Additionals, which if well accepted, and rightly pursued, would tend exceedingly to the prosperity, honour and plenty of this whole Nation; but of this, as I have formerly acquainted you more largely (for you have thought fit to

hint

hint it to the World in your *Reformed Husbandman*) I ſhall therefore proceed and ſay, that that dear and even naturall affection which I have to Husbandry, above all other employments among men, may (perhaps) have occaſioned my further enquiry into theſe affairs; and by thoſe obſervations to which I have given my ſelfe more then every man, I may have attained to farther inſight then every man hath troubled himſelf to take, which I freely preſent to my Native Countrey, at leaſt ſo much as concerns the matter here in Queſtion; namely, *The ſetting out of Land, as to the beſt Forme.*

I have obſerved that all or moſt part of the Lands, Lordſhips, Mannors, Pariſhes, Farmes, and particular Grounds, or Cloſes in *England* are not (or rather were not at that time paſt, when they were firſt) ſet out in any good Forme; too much of *England* being left as waſte ground in Commons, Mores, Heaths, Fens, Mariſhes, and the like, which are all Waſte Ground; but ſome more, ſome leſſe; ſome being made a little better uſe of then others; but all capable of very great Improvement, as not now yielding (not one of forty of them through *England*) the one fourth part of that profit either to private or publique, which they are reſpectively capable of.

I have obſerved in all places in *England* the great inconveniences that come by the Want of Encloſure, both to private and publique, the irregularity of theſe Lands that are incloſed, the frequent, and (as things now ſtand in relation to time paſt, and Land already ſet out) unremediable intanglements or intermixture of

Intereſt of ſeverall perſons in the ſame Common, in the ſame Field, in the ſame Cloſe, nay ſometimes in the ſame Acre. The inconvenient paſſages made or allowed between divers grounds, and that not onely, when they belong to ſeverall men, but even when one man is owner of divers grounds; and the truth is, either he that is poſſeſt of Lands, is a Lord or Tenant; if Lord, he ſeldome alters that Form he found his Lands in, whether he received them by Inheritance, or purchaſe; and if but Tenant, he would count it (for the moſt part) loſt labour, although he did indeed underſtand both the inconvenience and the right remedy: but I fear neither Lord nor Tenant do ſo, or at leaſt ſo, as to lay to heart the Croſſes or Loſſes they or their neighbours do too frequently ſuſtain meerly upon this accompt, or are too careleſſe or deſperate of the remedie.

I have obſerved the careleſſeneſſe and wickedneſſe of Servants and bad neighbours both; which a man ſhall be ſure to meet, let him remove as often, and to what place he will.

I have obſerved the proneneſs moſt of Cattel & Poultry to break into forbidden places, but above all others, commonly kept in *England* (not to ſpeak of Deer and Goats, or of wilde fowl, or the like) Swine, Coneys, and Pigeons, (and ſome ſorts of Poultry, at ſome ſeaſons) are moſt inclined to and frequent actors of miſchief, and that ſo great, that men dare hardly conſider it ſeriouſly, but let it paſſe to avoid vexation.

Who is it that lives a Countrey-life, but knowes, or may know, and upon enquiry finde, that one pair of old

old Pigeons eates of one ſort or another of Corn, and grain in the year at leaſt 6 buſhels, & that there are almoſt (if not altogether) as many ſuch pairs of Pidgeons, as there are men, women and children in *England*, and it is plain, they can get none, but either of what you have ſowne, or of what you ſhould reap, or of the ſheadings in the field, which were better beſtowed on your Swine or Poultry, or out of your barne, or rick, or threſhing-floor, from whence I ſuppoſe you cannot well ſpare it, or from the manger, ſtanding racks, or dunghill, all which your pigs and hens muſt want ſo much. I conclude as to this Creature, that there is no ſuch enemy to the proſperity of *England*, of his bigneſs ſo little taken notice of, or that yields ſo little return; nay I dare affirm, that all the beaſts & fouls in *England*, (wilde fowl, which we cannot ſo eaſily prevent, and Swine, and Coneys, which yet return abundantly more profit excepted) do not equalize the loſſe and damage ſuffered by this one ſort of ſmall birds; but let this ſerve by way of digreſſion, for the truth is, the Contrivance here principally intended is for the better caſting out of Lordſhips or Farmes in point of Forme, and doth no other way remedy this, but as it contracts your buſineſſe into a cloſe order, making it as eaſie to diſcover, and chaſe away this enemy in one ground, as in another, which is not commonly to be done in other places.

The next deſtructive Cattel are Coneys, they will eat down the Corn at the firſt coming up, ſometimes to its deſtruction, they will eat it down all along till Harveſt, and if it yet proſper in part, they will ſtand on their hinder legs, and crop off the ear juſt at the bottome

tome, and leave the ſtraw ſtanding, I have ſeen ſeverall fields in a conſiderable part ſo ſerved, they will deſtroy young Woods, by eating the bark away round about a foot high, and in good meadow and paſture make a thouſand croſſe paths, and in all grounds dig holes under the roots of trees, corn, &c. to a very great prejudice; and this evill is ſomething the worſe, in that there is no Fence in the common way againſt them, but the dog or gun, which is not alwayes allowed, yet to do this little beaſt right, it is not his fault but his Maſters, or thoſe that keeps him in no better order, for I do affirm, that few Creatures under heaven, (as they may be managed) turn to greater profit to the Owners, and yet may they be kept (all things conſidered) cheaper, and (in a manner) free from doing any hurt to his Owners, or their Neighbours; and ſo become a moſt pleaſant, profitable, harmleſſe creature. And thus to manage this Creature is moſt properly to be done by ſuch, whoſe Lands are divided, or ſub-divided into ſome ſuch Forme as theſe Charts expreſſe, and in ſuch a Farme it is not uneaſie to make theſe Creatures to do ſome eſpeciall ſervices even in his life-time.

The third moſt harmfull beaſt is the Swine, a Creature ſo ravenous, that children are ſcarce ſafe from a lean ſow that hath pigs, and for her to eat her own pigs is no very ſtrange thing; and to eat your Turkeys or Goſlings a thing often ſeen. And as Swine are ordered, there is hardly any thing ſafe from them; how will they break through almoſt any hedge, not onely eat, but root up & deſtroy the Corn abundantly, as likewiſe any graſs, trees, plants, or whatever corn is in their way, or they can come at: what and how great and frequent

are

are the losses abroad, and the nasty inconveniencies at home occasioned by this Creature? And herein they differ, and are worse then all other Cattle, that when they are in the corn they are not easily seen, and (if their owners or keepers misse them not) as too many of those that are called poor people, will not onely willingly not misse them, but (I have seen it, and suffered by it) will on set purpose drive them thither by which means they will sometimes get a haunt of a piece of corn, and go into it so cunningly, that a man can scarce finde where, but being a good way in, they will destroy wholly great spots of a rod or two together, and when a man shall discover them, he had almost as good let them alone, for without a dog they will but play bo-peep, and be running from place to place, but trample down and spoil more, and so they will do a good while also, though you have a dog. Seriously, Sir, I suppose, that though the Hog being fat, and dead is excellent meat, and of so large a body, and good price that he may be worth some pounds, yet there is not one Hog of ten, but (besides the corn given him, after put up to fat) hath one way or other lost, spoiled, destroyed, or devoured twice his price. Most of which inconveniences, as well the nastinesse as the dammage is almost totally prevented by the right Use of this Contrivance, which if, I may truely say, that with some additions to the Common, or for the better management of this Cattle, they are of exceeding Use and Profit equall to Cowes, Sheep, or any other, if not much beyond; but indeed all Cattle almost depend so necessarily on one anothers fellowship, that he that keeps one hath good reason to keep all, (but if any alone, Sheep.)

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The fourth neceſſary ſort of Creature fit to be about a Farme, is Poultry of all ſorts; whether Water-fowl, as Geeſe, Ducks, &c. or Land-fowl, as Turkeys, Hens, &c. The firſt ſort are of ſpeciall Uſe, and require more care then charge in the keeping, which care is eaſed very much by this Contrivance, and thoſe many ill turns, not unuſually done by Geeſe, prevented with an opportunity given to breed or keep many more without charge. The ſecond ſort are exceeding profitable, if bred and fed according to a ſafe and orderly Rule in a place convenient, allowing a large walk, yet preventing the harme they are apt to do. I am aſſured both by reaſon and experience, that very great profit above all charge may be had without much trouble by them that keep great ſtore of theſe ſorts ſafe and well, which I conceive will be much facilitated by this Contrivance.

All other greater Cattel, as Horſes and Mares, &c. Buls, Cowes and Oxen, &c. and all ſorts of Sheep, as they are apt to run into every Meadow, better paſture, or corn-grounds they can come at: ſo are they eaſier ſeen or prevented; and beſides, it troubles a man leſſe to make ſatisfaction to his Neighbour, or to bear his own loſſe patiently, when he conſiders, that ſuch Cattel many times (though not alwayes) are the better for what they have eaten, and may ſhortly one way or other make him ſome amends, either by their fat, or Fleece, or milk, or labour, or the like, whereas all the Pigeon, the lean Hog, or the Coney gets irregularly is meerly loſt.

And the evill Contrivance and Inter-mixture of wayes and Intereſts in moſt places of *England* is a ſpeciall reaſon, which many, even of the more Ingenious

ſort

ſort of men, that would fain yet do not attempt or endeavour thoſe many, great, and viſible wayes of better improvement that are in nature, and in view, and that becauſe they have no place ſecure enough, but may every day one before the other expect, that the careleſneſſe or wickedneſſe of their Neighbours, or their own children, or ſervants (yea, and by miſtake ſometimes themſelves) may let in all or any ſorts of theſe beaſts or fowls, (worſt of all Hogs or Coneys, which in the common way have moſt liberty and opportunity) to deſtroy all their labours and charges in an inſtant; therefore ſay they (not very wiſely nor induſtriouſly though) it is better ſit ſtil then riſe up and fall.

Whereas if *Engliſh* men would be reſolutely and ingeniouſly induſtrious by this, or ſome other, or better Contrivance, Way, or Means (which I ſhall gladly ſubſcribe to, when I ſee it) thoſe dangers may be avoided, and this Nation become in an age or two, as much (almoſt) beyond what it now is, as it now is beyond *Scotland* for fertility, or *Ireland* for good Husbandry. And we need hardly be beholden to any Nation under heaven for any of their Commodities, except *Spaniſh*-Wines and Spices, or ſome ſuch things, of which we have no ſimple neceſſity.

I have obſerved, that in moſt parts of *England*, eſpecially in Champion Countreys, the Paſtures lie neer home, and the Woods, Meads, and Corn-land lie at a great diſtance. And ſomething like it in incloſed grounds alſo, and that it is common to go through one Cloſe into another, whereas it is plain, that the corne or graſſe in the firſt Cloſe is liable to be eaten and troden down by the Cattle that paſſe to and again to the Cloſe beyond it. It is alſo very plain, that all Cattle

that are well, lusty, and not of immediate Use, are able to carry themselves to a greater distance, but that Wood, Corn, Hey, or the like, require much time, charge and pains to remove them; I appeal therefore, whether it be not fitter to send such Cattle further off, and have your Corn and Hey, (and Wood too, if need be) neerer home. And for your young, sick or weak, or infected Cattle in this Contrivance, there is provision made for such; as also for your Milch-Cowes at Milking-time, so well, that till I see some better I rest contented with this.

I have observed, that when the foul or home-sted is too neer the dwelling house (as it is in most places) it makes the Inhabitants liable to many inconveniences, and offensive sights and smels, as well within doors, as without; but here I refer my selfe whether that evil is not remedied, and yet the Barns, Stables, &c. neer enough for inspection, which is all the reason for their being neer; for as you have it in this Contrivance, you may at all time swith ease view and take accompt of your businesse, and yet be as neat and sweet as in a *Burgemasters* house in *Holland*.

Finally, here your house stands in the middle of all your little world (which you may build as your purse and fancy directs, though I could say something as to that in particular, which I take to be as effectuall if need were) enclosed with the Gardens and Orchards, refreshed with the beauty and odour of the blossomes, fruits and flowers, and the sweet melody of the chirping birds, that again encompast with little Closes, that all young, weak, or sick Cattle may be fostered under your own eye without losse or inconvenience, and all bound together as with a girdle, (and surely never had

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the old proverb, ungirt, unbleſt, a fitter or fuller ſenſe or application) and all that covered again, as with a fair large cloak of Meadow and Tillage, to which you may commit the corner paſturage, the Cape if you pleaſe, or the Sleeves to the Coat (for a Coat as well as a Cloak will ſerve to cover either knavery or foolery) of old cuſtomes or negligence. Here you have your Bake-houſe Brew-houſe, Darie, or the like; your Barns, Stables, and Out-houſes in ſuch apt places as may ſerve indifferently for all your occaſions. And no one ground to paſſe through into another, no probability of being treſpaſſed upon by others, or by your own, but the moſt perfect right and ample Uſe of every foot of ground incloſed entire, by all which (I doubt not) will make good what I have ſometimes affirmed; that beſides all other wayes of Improvement that may be farther added, this alone in meer point of Contrivance is enough to improve the value of your Eſtate one half part; *viz.* that if it were really worth 100 *li. per annum* before, it will thus become as really worth *150 li. per annum*, and the charge in caſting it into this forme, (eſpecially where no fences are already) little more, in ſome caſes not ſo much, though I muſt tell you, you cannot ſpare in any caſe more unhappily then here. And beſides profit, the eaſe and pleaſure will be better felt then expreſt in words.

Very much more might be ſaid in order to this, but it would too farre exceed the bounds of a Letter, and it is alſo not amiſſe to ſee how the World will accept or reject this firſt: From the hands of him, who ſubſcribes himſelf ever *SIR*,

Your moſt faithful, thankful Friend, and humble Servant,

Creſſey Dymock.

An Experiment for the multiplying of Corn, practiſed neer *Paris* in *France*, by ſome of that new order of Friers, who are there called *Peres de lâ doctrine Chreſtienne.*

INto two French pintes of rain-water, they did put a certain quantity of Cow-dung well rotted, and as much Sheeps-dung and pigeons dung. This water they boiled, till but half a pinte was left, then they ſtrained it through a linnen cloth, and in it diſſolved 3 ſmall handfuls of common ſalt, and as much Salt Peter. This brine they ſet in ſome veſſel upon hot aſhes, and in it they ſteeped their Seed-corn; which being ſo ordered, and at the uſuall ſeed-time, being put into barren ground. produced unuſuall increaſe, I my ſelfe have ſeen one hundred and fourteen eares upon one root, which, they told me, came from one ſingle corn ſo prepared. This way of theirs differs not much from that which I found in an old Manuſcript, and cannot diſlike. Take, ſaith he, rain-water that hath ſtood in ſome pool or pond till it putrifie. Put into it good ſtore of dung of horſes, kine, ſheep, goats, pigeons, hens, and any other beaſt or bird that feeds upon graſs or ſeeds. *An quia herbarum, & ſeminum Vita media vegetativa in ſtercoribus illis reſtiterit exaltanda?* Set this mixture eight dayes in the Sun, (or if you be in haſte, boil it over the fire half an hour, ſtirring it all the while,) afterward ſtrain it, and then make it ſtronger by putting into it more of the foreſaid ſorts of dung the ſecond time. This having ſtood as before, ſtrain out, and put into it ſome common ſalt, and a little Ox-gall. Into this liquor put your ſeed-corn; float or ſcum off all the light corns that ſwim; let the reſt lie in the liquor

quor 24 houres. Then take out your ſeed-corn; and ſpread it thin upon a linnen cloth, and dry it in the ſhadow. Put this ſeed into barren ground (for in ſuch it will thrive better then in a rich ſoil) you ſhall reap at leaſt an hundred-fold.

Another Secret worthy to be tryed by all ſuch as are lovers of the Advancement of Husbandry.

IN the choice of ſeed-corn, prefer that wheat which is moſt weighty, as being more maſculine and fitter for generation then the lighter graines. In the production of plants, the earth is conſidered as a female, whoſe ſterility may be much helped by the extraordinary melioration of the ſeed; As if you take water, which hath bin made fat with horſdung wel rotted, and afterwards diſſolve in it as many pounds of *Sal terræ* as you intend to ſowe acres. In this water ſteep the aforeſaid weighty ſeed for 24 hours. So ſhall you have a better crop then uſuall, though you ſowe but halfe the uſuall quantity of ſeed, and though your ground be not ſo often ploughed, nor be at all dunged; nay though it were barren of it ſelfe. Your harveſt will be ripe ſooner by a moneth, and by reaſon of the Salt-peter, this corn will be fitter for ſtore-houſes; for there it will lie ten years uncorrupted.

Obſervations and Animadverſions upon the foregoing ſecrets or experiments: Written by the Author of the large Letter in the *Legacy of Husbandry.*

COncerning the *Experiment* from *Paris* about ſteeping of Corn, I have told you heretofore that ſteeping of Barley is uſed in *Kent* to take away

way all ſoile, (except Drake) and alſo all light corn, further to accelerate growth, if it be ſowne late; and further, if pigeons dung be added, it may be as good as half a dunging; and I think I ſpeak high enough, for that little ſtrength that Corn draweth by this ſteeping cannot do wonders: and if all that Salt, Niter, Cow-dung, Sheeps, Pigeons dung, of this brine were caſt upon the earth, it would not dung a quarter of it, how then can the Extract do ſo much? I cannot as yet ſee any great reaſon for it, unleſſe perchance there be ſome occult vivification of the ſpirits of the Seed, which as yet I am ignorant o, As for an 114 ears of Corn from one, it's nothing: I have had from Oats 140 without any ſteeping, or ſuch doings; yet I have uſed ſome Art, which I may call a Secret; for I am perſwaded very few can do it: but I'le tell it you, and I would all the World did know, for it is a trifle: *viz.* when the Corn beginneth to ſpread, to lay either clods or Tileſhards, or any broad thing upon it to cauſe it to ſpread, and further, let not any corn grow within a foot and a half of it; and this is the great buſineſſe which every one may try (the lands alſo ought to be excellently good.) Further, I have had above 2000 grains for one, or of one cut in the midſt, and above 100 in one ear without ſteeping.

As to the ſecond Experiment of Brine, I think of it as of the former; onely I think it convenient to adde, that firſt they are to blame, who think to medicine the earth as Phyſicians do the Body, and therefore adde ſuch varieties of Dungs, as Cows, Pigeons, Horſe, Sheep, &c. as ſo many *Radices, Folia, Fructus, Semina, &c.* and then adde Salt and Niter as Phyſiians do Ginger and Mace, then a little Salt and Oxe-gall, as they do Musk and Amber-greeſe; then boil and ſtrain them

Cape

Cape colaturam, & diſſolve ut prius. I for my part think that our old Grandame the Earth ought not thus to be nurſed, and ſuppoſe there is more vanity in theſe then in the Apothecaries Bills. Secondly, Niter is coſtly: I fear the Crop will not pay the charges; for that I ſuppoſe the Countrey-man will conſider, though our projecting Husbandman do not. Thirdly, that it's a vanity to overcharge any liquor with too great a quantity of materials. For we know that the power of every thing is finite, and if you put Salt into water, ſuch a proportion it will diſſolve, if you put above that proportion, it finketh to the bottome, and there lies undiſſolved. Fourthly, that the cauſe of Fruitfulneſſe is not onely the *vita media* in dung; for when it is totally corrupted, and the *vita media* gone, it is very fruitfull: further, Chalke, Marle, Nitre, which are exceeding fruitfull, have no *vita media*. But concerning Fruitfulneſſe I have ſent you a ſhort Diſcourſe which is onely to ſhew you the difficulty of the Queſtion, and to ſtir up ſome other to attempt it.

As for the Concluſion of the proceſſe (or Experiment) *viz.* you ſhall reap an 100 fold: let me but dig Land, if it be not extreamly barren, I'le wager to have the ſame increaſe without all theſe ſlibber ſlops.

As to the laſt Proceſſe which I like beſt, having the greateſt probabilities; I anſwer, that to get this *Sal Terræ* to ſupply every mans occaſion, is more then I know how to obtain, and the trouble great; and I ſuppoſe he that hath that Salt needeth not horſe-dung; for rain-water I ſuppoſe will do better: and further, I deſire to know how he would extract it, and how it differeth from Niter: This proceſſe pleaſeth me, and I ſuppoſe the graines will be excellent and long laſting.

A great Queſtion concerning Fruitfulneſſe. Offered to all ingenious Searchers of Nature.

It is a main deficiencie in Husbandry, that though we by experience finde that all the foreſaid materials, and divers others, as oft-tilling, Husbandry, ſeaſons, &c. change of ſeed and Land, reſting of Lands, fencing &c. do cauſe Fertility: yet we are very ignorant of the true cauſes of Fertility, and know not what Chalk, Aſhes, Dung, Marle, Water, Air, Earth Sun, &c. do contribute: whether ſomething Eſſential, or Accidental; Material or Immaterial; Corporal or Spiritnal; Principal or Inſtrumental; Viſible or Inviſible? whether Saline, Sulphureous or Mercurial; or Watry, Earthy, Fiery, Aereal? or whether all things are nouriſhed by Vapours, Fumes, Atoms, Effluvia? or by Salt, as Urine, Embrionate or *non-ſpecificate?* or by Ferments, Odours Acidities? or from a *Chaos*, or inconfuſed, indigeſted, and unſpecificated lump? or from a Spermatick, dampiſh vapour which aſcendeth from the Centre of the Earth? or from the Influence of Heaven? or from Water onely impregnated, corrupted or fermented? or whether the Earth, by reaſon of the Divine Benediction hath an Infinite, multiplicative Vertue, as Fire, and the Seeds of all things have? or whether the multiplicity of Opinions of learned *Philoſophers* (as *Ariſtotle, Rupeſc. Sendivog. Norton, Helmont, Des Cartes, Digby, White, Plat. Glaubre*) concerning this Subject ſheweth the great difficulty of this Queſtion, which they at leaſure may peruſe. I for my part dare not venture on this vaſt Ocean in my ſmall bark, leſt I be ſwallowed up; yet if an opportunity preſents, ſhall venture to give ſome hints, that ſome more able Pen may engage in this difficult Queſtion which ſtrikes at the Root of Nature, and may unlock ſome of her choiceſt treaſures. The Lord *Bacon* hath gathered ſtubble (as he ingenuouſly and truly affirms) for the bricks of this foundation; but as yet I have not ſeen ſo much as a ſolid foundation plainly laid by any, on which an ingenious Man might venture to raiſe a noble Fabrick: I acknowledge the burthen too heavy for my ſhoulders. *FINIS.*

A further Explanation on the foregoing Letter and Cards concerning Division, or setting out of Land, as to the best form. With an Exposition of the words Sal Terræ, *what is to be understood by them in the fore-mentioned Experiment of Husbandry.*

SIR,

IN obedience to your Commands, I shall thus proceed to give you further hints of the Advantages that may be had by casting Lands into some such Forme, as the Plot or Card Presented you with formerly, doth more fully shew. If you set your house in the Centre of your Lordship, or great Farme, then are you equally distant (in a manner) to all the parts thereof, which I take to be no small conveniencie. Against this I know it may be objected, that (especially in such a place as the great Fenne) it will then be too far from the great Dreynes, neer unto which it hath been thought fit to set the Houses, that Boats may come to the door, which they may as well do, being with small charge let into your house, which charge or trouble being set against those other inconveniences of such as are made or continued by setting the house at the end of the Land for the Dreynes sake, will be found inconsiderable. For Example. The common way of casting out their Levels or Proportions for Tenements are into pieces of 100 Acres; (this is taken from the level in the Isle of *Axholm*, the casting out of the hundred in the great Fen being worse then that;) this runs backwards from the great Dreyn, where your House stands, at least 2200 yards, and all the passage you have to any of your grounds is through all that is between that part and the House; so that part of your work or Harvest lies a long mile from home. Now the same proportion of 100 Acres being cast in a square Forme, the equall sides will be about

127 rods; the half of which is about 64 Rods from the Drayne to the Houſe or Centre of your Land, to which to caſt a ditch from the main Dreyne of 15 foot wide, and as deep as the Dreyn, may coſt, ſay 5 *ſhil. per* Rod, which is too much, it amounts but to 16 *li.* and you have as good advantage by boat, as if your Houſe had ſtood on the grand Dreyn and better.' Tis true, every Houſe that ſtands behinde you, which are two in number more, upon the ſame length, will coſt juſt as much more either of them, but with that charge once for all, they are fitted with boatage for ever, and the whole land laid ſo much more dry. Now put in the other ſcale the Conveniencies and Profits, or prevention of loſſe or charge (thus:) whereas before all your ground ſowed with corn, or lying for meadow, ſaving that next your Houſe, muſt have coſt you double, treble, quadruple, 5, five times, ſix times in ſome caſes, as far carriage as the ſame will do now, as oft in the day, week, moneth, year, or all years to come, as you ſhall have occaſion; which well conſidered, is a moſt eaſie purchaſe. Secondly, as oft as your ſelf or your ſervants have occaſion to go to any of the farther Cloſes, much time muſt be loſt in going and comming, which might have been much better ſpent. Thirdly, you cannot drive any Cattel to the fartheſt Cloſes, if they ſhould lie for graſſe, for which they are fitteſt, but through thoſe neerer, which then may be ſowed with Corn; and it is not eaſie to foreſee the loſſe you may ſuſtain by the careleſſeneſſe of ſervants by ſo doing. Laſtly, (for there are many other Inconveniences and Wayes to loſſe, which for brevities ſake I omit) if your own Cattel be gotten into your own Corn, or your bad neighbours into either Corn, Meadow, or Paſtures, they are not altogether ſo ſoon diſcovered at ſo great diſtances, *as that form allowes*, and to put them out will prove half a dayes work almoſt; all which put together, will ſo abundantly repay that

ſmall

ſmall Charge, that I ſuppoſe I need enforce this no farther; and I believe, that the Landlord need not be at all the charge; for the Tenants conveniencie will invite him to bear a great part of it; for here as you ſee by the Card ſtriking a Circle from your Houſe, at the Centre as wide as your Square will admit, all your land (except the Corners, which are deſtined for paſture for your ſtronger Cattel, and of leaſt preſent uſe) will be at one and the ſame diſtance from you, and the fartheſt (if there were any fartheſt) but the Semidiameter of your Circle, which is but 350 yards, or ſeventeen ſcore and ten to the fartheſt end thereof, and but 130 yards, or ſix ſcore and ten to the neareſt end; the carriage alike eaſie and ſhort, the inſpection and uſe or drift alike eaſie and of quick diſpatch, and no going through any one into the other, but having all in ſo cloſe an order, and ſo ready at your Command for all purpoſes, that you will be incouraged to make more or better then common Uſes of ſome parts of your Land, which may turne to your profit exceedingly, if you be but a little vigilant. If your ground being either ſand (or any thing but boggy, moriſh, or peat Land) then may you plant Hedges, Orchards, Gardens, &c. your Houſe ſtands in the midſt, (which alſo I would build round, which Forme I ſuppoſe to be of moſt beauty, uſe, and leaſt coſt to him that will give his minde to conſider it rightly) I would allow for the ſituation of my Houſe, and ſome Gardens next it, of the delicater ſort half an Acre of Land, and next without that for Orchards and Kitchin-Gardens, at leaſt one Acre, and one half, or two Acres more, both caſt into a round forme, one encompaſſing the other (for which and all that follow, I refer, to the ſight of the Card it ſelf, which ſets it forth more fully to the eye) without that again, I would allow 9 Acres to be divided into ſeverall little Cloſes for the Uſes in the Card mentioned; ſome bigger, ſome leſſer, as

I should see cause, and to binde all this together, I would again encompasse all those with one undivided ring, which should contain about four Acres (deducting out of all these proportions respectively so much as was taken up with or in hedges, ditches, walls, &c.) double fenced, inwards from the little Closes round about, and outward from the last Circle of great Closes; out of every of which great Closes (all of them at their neerer or smaller ends, *butting* upon this ring) I would have a bridge or gate strong and stanch, that I might let in what I would, but that nothing might get in without my leave. I would have from my House four equally quartered out-passages to this Middle ring, and from that again straight forwards to the Outside of my Lands well ditched, gated, fenced; I would set my Bake-house, Brew-house, Wash-house, Darie, or the like, without the second Circle, *viz.* just without my Kitchin-Garden and Orchards, and within or at the neerer end to the House of the little Closes, and for the side of the House, as whether to set this on the North, or that on the South, &c. of the dwelling-House, I leave to every mans discretion. As for my Barnes, Stables, or Houses, if any Swine-coates, Hen-houses, Malt-Kilnes, and all that usually is called, or belongs to a *Fold-stead*, as racks to feed Cattel without doors, &c. I would place at such quarters as I thought fit, some at one quarter, some at another, but all on the girdle or middle ring, in or on which I would also make so many Coney-berries (where the ground will any way bear it) as I can fore-see, can there live, and be well maintained; where note, that they are not onely to be maintained by the grasse growing on the ring it selfe, but at discretion to be let into all or any the other great or small Closes, at such times, and for such purposes, as I shall finde convenient and safe, and when they shall do me good service and no hurt, and not otherwise, upon which

tearmes

tearmes alſo I will let in my ſheep, hogs, poultry, &c. having them all alwayes at command to be driven out again at pleaſure, when they can do no more good, or are like to do hurt there; thus will my dung be bred in ſuch places, from whence with eaſe I can diſtribute it either inwards to my Orchards and Gardens, or outwards to my tillage, &c. with wonderfull eaſe.

Thus ſhall my Houſes not be in ſuch eminent danger all at once, in caſe of any unfortunate fire; thus will thoſe kindes of naſtineſſe, which is in many places too frequent, be avoided, and yet the uttermoſt part of my Foldſtead for inſpection not above fiveſcore, or a good ſtones throw from my dwelling-houſe, to which I can go at any time in a pair of minutes, and to the other Offices in leſſe then one; the corner-pieces that the grand Circle within the Square leaves, being fartheſt off, yet are within leſs *then twice* twelveſcore, which being (in generall, for upon particular cauſe you may at pleaſure plough them for a time, and lay them down again) allotted to be paſture for your Milch-cowes, and all ſuch ſtronger Cattel as you have not preſent uſe for, as I ſaid before, they may be driven, as occaſion ſerves, with much eaſe: for this is highly worth conſideration in Husbandry (for the thing is better known then conſidered) that a little difference in diſtance (though it be but one Acres length, which is but 220 yards) occaſions a trouble or charge, not a little more when ſowen with Corne, or let lie for Meadow, then when grazed with ſtrong Cattel. For admit that piece to be ſquare, then it contains 10 Acres, which may well yield at leaſt 20 wain-loads, or Cart-loads of corn, every of which is worth ſix-pence or foure pence at leaſt to carry an Acres length, and ſo for every Acres length that ſhall be added; whereas to drive an hundred Milch-cowes, a flock of ſheep or the like, will require but a man or a boy, and his dog. And of what advantage diſpatch is, (or may ſometimes

times happen to be especially) is not easie to be valued. Now as it is apparent to me; so I think it is or may be to all men, that the Position is true, and that this Way meerly in the Contrivance, without or besides any other Improvement shall make 100 Acres, to all intents and purposes as usefull and profitable, as 150 Acres can be (that being also without any other Improvement then the meer common Forme of casting out and the uses that Form is capable of) in the common Forme. But that the common Forme is capable of good improvement, I deny not, but I affirm this to be much more; for this is apt for many Uses which are altogether unfit for, and not used, nor possibly to be used upon the common Forms of Farme, and to those Uses, to which common Farmes are, or may be put, these may be put also, but with more ease, safety, profit and pleasure abundantly. And If my new Invention for Setting of Corn, and all its Parts, were put in Execution (together with some other Inventions or Contrivances for, in, or concerning other the parts of Universal Husbandry, which God hath given into my hands (and for which I praise his great Name for ever) upon a parcell of good Land in this Forme, I fear it would be, or give but too much of profit and delight for men to enjoy in this life. I shall therefore, as to my own Interest, or action, in these things, and its extension or increase, wholly refer my self to God, and to his righteous will and wise dispensation how, how far, what friends or means he will raise for me, or with me to advance these works in themselves great & good, and doubtlesse to him acceptable, while not abused; but then like all other blessings becoming curses. And, Sir, ever rest

Your most obliged, thankfull, and affectionate Friend and Servant,

C. D.

An Expoſition of the Words, What is meant by Sal-Terræ, *in the fore-mentioned Experiment of Husbandry.*

Sal-Terræ is nothing but ſuch Niter as we commonly uſe, and which is drawn out of fat earths, and boiled, &c.

If you cannot get fat earth for that purpoſe, take common ſalt, and purifie it, for by ſo doing you ſhall ſtrengthen its attractive vertue. By which when it is in the earth, it will as it were magnetically attract to it ſelf all the ſaltneſſe that is neer it, and ſo make it ſelfe more ſtrong.

Another.

Sal-Terræ is not *Salt-Peter*, but a ſalt of ſuch earth, as owes not its fatneſſe to dung, but was onely impregnated from heaven: therefore it is beſt ſeeking it upon ſuch high Lands, where it is not likely that ever any man carried up any dung or compoſt to lay upon it. This Earth muſt be handled like *Salt-Peter*-Earth; but when you boil the liquor, it will not ſhoot like *Salt-Peter*, but muſt be boiled up like other common-ſalt, &c.

Another.

Sal-Terræ is no otherwiſe to be Engliſhed, but word for word, *Salt-of-Earth*: and the manner of extracting of it is to calcine the earth, and to make a Lie of the aſhes evaporating afterwards the ſame, in the ſame manner as the Salt of all other Aſhes is made. For to ſeparate any ſalt from crude Earth (except what hath been converted into *Salt-Peter*, or commeth forth in the company of *Salt-Peter*) that is, abſolutely impoſſible. As for the difference of that Salt from Niter, that conſiſteth herein, that Niter is a Salt extreamly ſpirituous and unctuous; of which two qualities the other Salt ſtill ſubſiſting in its own groſſe, and as it were terreſtriall nature, is very little participant.

An Advertisement to the Reader *concerning the fore-going Expositions of* Sal Terræ.

Gentle Reader,

BE pleased to take notice that to perfect the knowledge of the Experiment, I consulted with some Friends about the meaning of *Sal Terræ*, what it is, and received from them the three severall Answers, which I have here imparted unto thee: but because they are not yet clear and satisfactory to my self, as somewhat varying from each other, I hope to procure for the Publick Good a more full discovery of this Subject, which one who is a great searcher into the mysteries of Nature hath an inclination to write of, & to shew that Fecundity and Nutriment as well in Vegetables, as in Animals, doth wholly depend on Nitre, the Nature whereof he conceives to be known to very few, if to any at all. And as for *Sal-peter*, whereof hitherto the use hath chiefly been known in the making of Gun-powder, there are some endeavours a foot, whereby the usefulnesse thereof in husbandry also will be made known, which in due time may be imparted unto this Common-wealth; for I finde some of my noble and worthy Friends of the same opinion with my self, who are perswaded (to use the words of one of them in his Letter to me.) *That the Matter, by which men are killed and fed, is but one and the same, and differs onely in the minde and hand that uses it; and that God will go beyond the Devil in his own Materials of destruction, by changing the use of them into a Blessing; For that is most agreeable to his Power and Goodnesse, to raise best out of worse, by changing onely the Use:*

In whom I rest alwayes,

Thy most willing and
assured Servant,
Samuel Hartlib.

AN
ESSAY
UPON
Maſter *W. POTTERS* Deſigne:
Concerning a *Bank* of *Lands* to be erected throughout this *COMMON-WEALTH.*

Whereby Lands may be improved in a New Way to become the ground for increaſe of *Trading*, and of Publique and Private *Revenues*, and *Accommodations*. Repreſented thus briefly, by a Perſon of ſingular *Zeal* and *Integrity* to all PUBLIKE INTEREST: To the end, that the *Author's* own *Conceptions* may be taken notice of by others, and he draw'n forth to make out this Great Buſineſſe more fully in due time.

London, Printed for *Richard Wodenothe* in *Leaden*-hall-ſtreet.

A N

Eſſay upon Mr. *W. Potters* Deſigne concerning a Bank of Lands to be erected *throughout this Common-wealth.*

THere is no man, but muſt live by the fruits, either of his own labours or of what his friends have left him. And becauſe no one perſon is fitted for all Vocations, nor any one Vocation fitted to produce all kinde of neceſſaries for mans uſe, from hence there aroſe (from the beginning) a neceſſity of ſome ſuch *Medium* of Commerce, which we ordinarily call Money, to be currant, between ſuch as have, either no reciprocal want, of each others commodities, or no liking of each others conditions or price.

This Univerſal credit or *Medium* of Commerce, hath been (through all former ages) placed in the metals of Gold and Silver; other metals (by being made currant money, (by the Authority of ſome States) beyond their intrinſick value) having approved themſelves, to be very ſubject, either to the inconvenience of being counterfeited, by diſhoneſt perſons, or Neighbour Nations, or to be (by the injuſtice of the Prince) ſometimes altered to a higher or lower value, a cheat too ordinarily made uſe of, by the Kings of *Spain*.

The Inconveniencies that have bin found (by the latter ages) in, theſe two metals of Gold Silver, are,

Firſt, that there hath not bin (at leaſt not yet) a ſufficient quantity of either of them, to ſupply all Nations towards that in-

creaſe of Trade, which a greater quantity of money (if it could be had) would produce; It being an infallible Rule, that money being that, which every man (his petty occaſions ſupply'd) ſeeks to employ in Land, Trade, at Intereſt, or ſome ſuch other way, as may make him a yeerly return of gain) the more there is of money in any Nation, the quicker alſo muſt all thoſe wayes be, wherein money is ordinarily imployed.

The ſecond Inconvenience is, that all thoſe Countries, that have inconſiderate Mines of Gold and Silver, or (perhaps) none at all, muſt (for the obteining of a thing, ſo neceſſary to the upholding of ordinary Commerce among themſelves and with other Nations) part with ſo much of their beſt Staple-Commodities, as will purchaſe the Gold and Silver they want, from that great Merchant of Gold and Silver, the King of *Spain*; whereas, (could there be ſome ſuch other *Medium* of Commerce found out, as this Common-wealth might (without paying or being liable, or beholding, to any other Prince) raiſe, to, and within it ſelf) there would be many Millions worth of our Staple-Commodities (now) ſaved, which muſt otherwiſe be parted with, to ſupply our preſent want of money.

The third Inconvenience, which hath been found, eſpecially in Silver (the moſt common metall of the two) is; that the keeping of it in a private Caſh is dangerous; the continuall carrying of it from place to place, is both dangerous and troubleſome; and the delivery and telling of it, from hand to hand, is none of the leaſt buſineſſes in a Common-wealth, eſpecially if verſed in Trade.

Towards the obviating of theſe laſt Inconveniencies, aroſe that admirable Invention of a Bank; which (in ſhort) is no other thing, then a tranſmitting of the Ownerſhip of money, (depoſited in a Publique Treaſury, and ſecured (there) by Pub-

Publique Authority) from hand to hand, by assignation onely; without the danger and trouble of keeping, carrying, or telling it.

This way of assignation of the Ownership of money, or credit in Bank, hath, (among Merchants) approved it self, to be of excellent use, for the dispatch of all their business of payment.

But the Inconveniencies, which this kinde of payment, (by way of assignation) hath not remedied, are

1 That it hath been (hitherto) applied, to the dispatch of business of payments, among Merchants onely, and not (ordinarily) to the concernments of the rest of the people, of the Nation, where the Bank is kept.

2 That it is a better way onely, of the use of Gold and Silver, towards the dispatch of the business of Payment; and not at all any new *Medium* of Commerce; money being still, that necessary requisite to a Bank, without or beyond which, a Bank can neither be raised nor extended; since the having of more Credit, to be currant in a Bank, then there is money to answer it, is no better then a publique Cheat; and to be accounted, so much worse, then in any private person, in that Rulers have (by their Office) a more immediate Image of God, and have been (in some places of Scripture) honoured with that name, and shall not the Judge of all the earth or of all Nations do right?

3 That money (deposited (as above mentioned) in any one place) proves, not onely a temptation to the sword (as lately in *Holland*) but (if once surpriz'd) becomes a certain loss to all the Owners, and an invincible opportunity, (in the hand of the possessor) against the State or Common-wealth in which such Banks are kept.

Having thus hinted; first, the absolute necessity (from the beginning) of some *Medium* of Commerce; Secondly, the in-

Inconveniencies of thoſe metals (Gold and Silver) in which this *Medium* of Commerce or Univerſall Credit, hath formerly been placed. And thirdly, the imperfection of Banks, (though an excellent invention) becauſe they are but a lame and ſhort remedy to thoſe Inconveniencies. That which remains, is, (from a due conſideration, of every part of the premiſſes) to hold forth (if it may be) ſome ſuch New *Medium* of Commerce (in the place of Gold and Silver) as,

1 Shall be (at leaſt) of as true intrinſick value, as Gold and Silver.

2 May be raiſed by this Common-wealth, within it ſelf, without any parting with our Staple-Commodities for it, and without ſupplying the King of *Spain*, (who in the judgement of wiſe men) is likelieſt to be our final and greateſt enemy.

3 May be extended, to ten times more, then ever this Nation was owner of in money; to the incredible increaſe of in-land Commerce, and (conſequently) of exportation and forreign Trade.

4 May be managed, without any leaſt danger, either (of loſs) to the Owners, or (of conqueſt) to the Common-wealth.

5 May be tranſmitted, between perſon and perſon, and between place and place, with as much eaſe and ſecurity, as is to be found in forreign Banks.

6 Will leave all the money (which either is yet remaining, or ſhall hereafter (by a wiſe ordering of our Trade) increaſe within this Nation) free for the Peoples uſe, without burying of it, (as if the Rulers be juſt and true) is done in Forreign Banks.

7 If to the premiſſes there can be added; firſt, how the private perſon may (readily without any trouble or charge) obtein money, at three pound *per Cent.* Secondly, how ſuch

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a Revenue, may be raiſed to the Publique, as may (in a great part, if not altogether) take away the neceſſity, of any future Taxes whatſoever from the people, the Propoſi ions may (perhaps) deſerve acceptance.

Now ſince the Propoſition to be made, towards ſo great a ſcope, is no other, then a complication of ſeveral things, already practiſed in the World, and ariſes chiefly from the ground of reaſon, upon which Forreign Banks conſiſt; I ſhall (therefore) by way of inlargement of what hath been above hinted, concerning Forreign Banks, ſay;

1 That the manner of the Banks beyond the Sea, is that one ſpecies of money (ſuch as Authority appoints) is brought into a Bank, or Publique Treaſury.

2 That the money thus depoſited, is (inſtead of being taken out, carried and delivered) paſſed (from perſon to perſon) by aſſignation onely of the Ownerſhip of ſo much money; which (in the language of the place) is called credit in Bank or Bank-credit.

3 That (becauſe all payments of Bils of Exchange muſt (by a Law eſtabliſhed) be made at the Bank, it (from thence) comes to paſs, that the Owners of the money in Bank (though they may) do yet ſeldome or never take out their money, but make their payments by aſſignation onely of their credit in Bank, which goes (in a continual ſuit) from hand to hand, with ſeldome or never taking the money out of the Bank.

Towards the raiſing of thoſe Banks at the firſt, two Laws were neceſſary from Authority, and eſtabliſhed (accordingly) by them; firſt, that all payments of Bils (above twenty or thirty pounds) ſhould be made at one place or Bank.

Secondly, that all Payments to be made at that one place, ſhould be made (alſo) in one ſpecies of Coine. After the example of publique Authorities, and of the Banks in Forreign

reign parts, it is (towards a far more valuable end) propoſed.

1 That there be (by Authority) a hundred ſeveral places (or more if occaſion require) appointed in this Commonwealth, where all payments whatſoever (above ten or twenty pounds) ſhall be made and recorded, and this for avoiding of difference in all ſuch payments.

2 That all payments (above ten or twenty pounds) be enjoyned by authority, to be made in Bank-credit.

3 That there be no way, to raiſe this credit in Bank, but by morgage of Land, for the ſecurity of thoſe who (from time to time) ſhall be Owners of the Credit in Bank; And the condition of the morgage to be, either to pay ſo much money with intereſt at ſix pounds *per Centum*, within a twelve moneth from the day, that Bank-credit ſhould (any way) fail to be currant, or (in default of ſuch payment) the Land to be forfeited without redemption, and to be divided, among the Owners of the Credit in Bank.

From the premiſſes theſe conſequences will follow;

1 The making of all payments, at the ſeverall places above-mentioned, will raiſe ſo many Banks.

2 The injoyning of all payments above ten or twenty pounds) to be made in Bank-Credit, will make money (in payments above ten or twenty pounds) to be a ſeeker, to be turned into Bank-Credit, being (it ſelf) not currant, in ten or twenty pound payments, till ſo converted.

3 The raiſing of Bank-Credit, onely by or upon Land, will avoid; all counterfeiting; (as in caſe of Copper-money) all danger of ſurprize (as lately in *Holland*) there being (by the Law of the Bank) no money to reſt there; all hazard to them, that ſhall be (from time to time) Owners of all the credit in the Bank, becauſe there is no credit in the Bank, but what is ſufficiently ſecured in the ſame manner as money, that is now borrowed upon Land.

4 It will multiply Money, (or that which will ſupply the place of Money) in the Land to two thirds, three fourths, four fifths, (or (perhaps) more) of the value of the Lands of the Nation, which can amount to little leſſe then a hundred millions Sterling.

5 It will furniſh the Landed man with Bank-credit (currant in payment) at two *per Cent.*

6 By two *per Cent.* payable (yearly) to the publique, for one thouſand, ſix hundred, ſixty ſix pounds, thirteen ſhillings and four pence of Banke-credit, upon every hundred pound *per Annum*; the publique will receive (yearly) 33 pounds, 13 ſhillings, 4 pence out of every hundred pound, *per Annum*, that is, one third of the Rents of all the Lands, that are morgaged; which is almoſt or altogether double to what is now raiſed upon Lands, and which (the whole revenue of Lands being rated but at ſix Millions *per Annum*) comes to two Millions *per Annum* to the Publique, for the defraying of all publique charges, without any neceſſiy of other Taxes.

Memorandum, that all Lands, not morgaged to the Bank, are left to pay the preſent taxes; and ſo there will be no leaſt diſturbance to the preſent publique Revenue.

FINIS.